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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,855	11/09/2001	Frank Rinn	34691/240549	1851

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EXAMINER

SAINT SURIN, JACQUES M

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 08/22/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,855

Applicant(s)

RINN, FRANK

Examiner

Jacques M Saint-Surin

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to the amendment of 06/16/03.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 30-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al. (US Patent 5,621,172)

Regarding claim 30, Wilson et al. ('172) discloses a device for examining materials (device 10 of Fig. 1) comprising:

a pulse generator (computer 12 generates waveforms, preferably a sinusoidal swept frequency waveform, that are applied to the test material by the driver 22 for generating a pulse that can be introduced into the material (see: col. 5, lines 49-53);

at least one sensor (force sensor 24, see: Fig. 2 and col. 5, line 53) configured for being positioned with respect to the material (pole 32, see: Fig. 2) so as to detect the pulse; and an electronic evaluation device (computer 12 then performs a transfer function analysis on the digitized data based on the force and acceleration data collected (see: col. 5, lines 57-61) and acceleration response sensors 26, 28 and 30 are coupled to the material to be tested to record the change in signal level between the drive point and the location where each sensor is mounted, see: col. 8, lines 38-42) for discriminating the pulse from interfering pulses, (sensor 26 is preferably coupled to the material at or adjacent to the drive point, see: col. 8, lines 44-46). However, Wilson does

not specifically disclose or suggest the electronic evaluation device and the at least one sensor being integrated in a unitary structure. Note that it has been held that the term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. In re Hotte, 177 USPQ 326, 328 (CCPA 1973). Furthermore, the term "integral" does not require a unitary one-piece structure. In re Kohno, 391 F.2d 959, 157 USPQ 275 (CCPA 1968); In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965). Therefore, it would have been obvious to integrate two different devices in a unitary structure with the aid of fastening and welding as suggested above.

Regarding claim 31, Wilson et al. ('172) discloses driver 22 applies the synthesized waveform to the material to be tested wherein the pulse is an electrical pulse.

Regarding claims 32-34, Wilson et al. ('172) discloses as with electronic device, a power source is provided to supply electrical power to the electronic components. Furthermore, Fig. 2 shows a central unit as computer 12.

Regarding claim 35, Wilson et al. ('172) discloses a plurality of sensors 2, 26, 28 and 30.

Regarding claims 36-37, Wilson et al. ('172) discloses the driver and accelerometer can be attached to utility poles using mechanical fasteners and as with any electronic device, a power source is provided to supply electrical power to the electronic components, see: col. 3, lines 38-47.

Regarding claim 38, Wilson shows in Fig. 2 sensors 24, 26, 28 and 30 are operatively connected to computer 12 via a transmitter-receiver unit (drive point 34) associated with each sensor.

Regarding claims 39-40, Wilson et al. ('172) discloses the driver includes a piezoceramic driver (col. 2, lines 62-67 and col. 3, lines 1-5).

Regarding claims 41-44, Wilson et al. ('172) discloses the digital signals are then transferred into the main computer 12 using specialized computer code which produces an estimate of the strength of the material being tested. Computer 12 also is useful for storing additional information, such as pole number, pole location, species, class, treatment type, condition, quality and strength.

Regarding claim 45, Wilson et al. ('172) discloses in step 64 a user menu is displayed which suggests the device inherently includes a display to evaluate the results.

Regarding claim 46, Wilson discloses sensors 24, 26, 28 and 30 that inherently include a pulse generator.

Regarding claims 47-48, Wilson et al. discloses acceleration response sensors are coupled to the material to be tested to record the change in signal level between the drive point and the location where each sensor is mounted, see: col. 8, lines 38-43.

Regarding claim 49, Wilson et al. ('172) discloses an impact hammer, see: col. 12, line 25.

Regarding claim 50, Wilson discloses the analog signals from force sensor 24 and acceleration sensors 26, 28 and 30 may be amplified using a fixed gain amplifier 48, see: col. 9, lines 11-13.

Regarding claim 51, Wilson discloses sensors are connected to utility pole 32, see: Fig. 2.

Regarding claim 52, Wilson shows each sensor is connected to a rope with an angle display.

4. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson et al. (US Patent 5,621,172) in view of White (US Patent 3,901,597).

Claim 53 differs from Wilson et al. by reciting an infrared or laser distance measuring instrument. White ('597) discloses an optical device to measure the distance to a diffuse surface without mechanical contact, see: col. 1, lines 24-26. It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize in Wilson the optical device of White because it would employ optical contact between a diffuse surface and the focal saddle of a lens to provide a precise measure of distance in a reliable manner.

REMARKS

5. In response to applicant's argument on page 6 of the response of 06/16/03 that "as an important aspect of the invention, the pulse sensor 3 and an electronic evaluation device 4 are integrated in a unitary structure, note Fig. 2" and also on page 7 "the electronic evaluation device, i.e. the computer 12, is not positioned so as to be integrated in a unitary structure with each sensor 24". The Examiner agrees with

Applicant's argument, however, it has been held that the term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. In re Hotte, 177 USPQ 326, 328 (CCPA 1973). Furthermore, the term "integral" does not require a unitary one-piece structure. In re Kohno, 391 F.2d 959, 157 USPQ 275 (CCPA 1968); In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965).

Response to Arguments

6. Applicant's arguments filed 6/16/03 have been fully considered but they are not persuasive.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2856

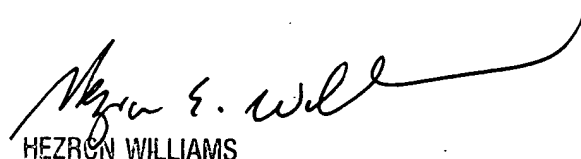
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M. Saint-Surin whose telephone number is (703) 308-3698. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.



Jacques M. Saint-Surin
August 19, 2003



HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800